

Application No. 10/617,852
Reply to Final Office Action of February 10, 2005

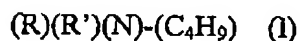
Amendments to the Claims

This listing of claims will replace all prior versions and listing of claims in this application.

Listing of Claims:

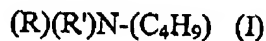
Claims 1-30 (Canceled)

31. (New) A process for preparing a crystalline silicoaluminophosphate molecular sieve of the AEL framework type, which process comprises; forming a reaction mixture comprising a source of alumina, a source of phosphate, a source of silica and at least one organic template which comprises one or more tertiary amines of the general formula (I):



wherein R and R', which may be the same or different groups, are substituted or un-substituted aliphatic or cycloaliphatic groups, except butyl groups, inducing crystallization of crystalline molecular sieve, and recovering the crystalline molecular sieve.

32. (New) The process of claim 31, wherein the molar ratio of organic template to Al_2O_3 in the synthesis mixture is less than 3.
33. (New) A process as claimed in claim 31 wherein the one or more tertiary amines have the general formula (I):



wherein R and R' contain from 1 to 3 or 5 to 12 carbon atoms.

34. (New) A process as claimed in claim 33, wherein R and R' are linear alkyl groups, but not butyl groups.
35. (New) A process as claimed in claim 33, wherein R and R' contain a branched alkyl group but not butyl groups.

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36. (New) A process as claimed in claim 33, wherein R and R' are independently one of the following alkyl moieties: methyl, ethyl, n-propyl, iso-propyl, n-pentyl, iso-pentyl, n-hexyl, iso-hexyl, heptyl, iso-heptyl, n-octyl, iso-octyl, n-decyl, iso-decyl, n-undecyl, iso-undecyl, n-dodecyl and iso-dodecyl.
37. (New) A process as claimed in claim 33, wherein R and R' are independently methyl, ethyl and propyl.
38. (New) A process as claimed in claim 33, wherein R and R' are methyl.
39. (New) A process for preparing a crystalline silicoaluminophosphate molecular sieve, which process comprises; forming a reaction mixture comprising a source of alumina, a source of phosphate, a source of silica and at least one organic template which comprises one or more tertiary amines of the general formula (I):
- $$(R)(R')(N)-(C_4H_9) \quad (I)$$
- wherein R and R', which may be the same or different groups, except butyl groups, are selected from the group consisting of substituted or un-substituted cycloaliphatic groups, linear or branched alcohol groups, and linear or branched amine-containing groups, inducing crystallization of crystalline molecular sieve, and recovering the crystalline molecular sieve.
40. (New) A process as claimed in claim 39, wherein R and R' are cycloaliphatic groups.
41. (New) A process as claimed in claim 39, wherein R and R' are linear or branched alcohol groups, or linear or branched amine-containing groups.
42. (New) A process as claimed in claim 31 or claim 39, further comprising the step of calcining the crystalline molecular sieve.

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43. (New) A process as claimed in claim 31 or claim 39, wherein the $-C_4H_9$ group in formula (I) is n-butyl.
44. (New) A process according to claim 31 or claim 39, wherein the molar ratio of P_2O_5/Al_2O_3 ratio in the synthesis mixture is within the range of 0.8 to 1.3.
45. (New) A silicoaluminophosphate molecular sieve, substantially of AEL framework type, comprising within its intra-crystalline structure at least one template which contains one or more tertiary amines having the general formula (I):
- $$(R)(R')N-(C_4H_9) \quad (I)$$
- wherein R and R', which may be the same or different groups, are substituted or un-substituted aliphatic or cycloaliphatic groups, except butyl groups.
46. (New) The silicoaluminophosphate molecular sieve of claim 45, wherein the tertiary amine is N,N-dimethylbutylamine.
47. (New) The silicoaluminophosphate molecular sieve of claim 46, wherein the molecular sieve is SAPO-11.
48. (New) The silicoaluminophosphate molecular sieve of claim 45, having a platelet morphology.
49. (New) A method for the manufacture of a formulated catalyst composition, which method comprises forming a mixture comprising at least one silicoaluminophosphate molecular sieve according to claim 45 with at least one formulating agent, to form a catalyst composition.
50. (New) A formulated molecular sieve composition comprising at least one silicoaluminophosphate molecular sieve according to claim 45 in admixture with at least one formulating agent.